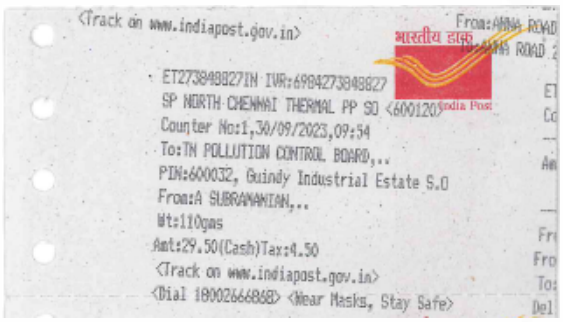
adani
Ports and Logistics

KATTUPALLI PORT
CHENNAI's NEW GATEWAY

MIDPL/ENV/TNPCB/ES/2023/32 **Date: 23.09.2023**



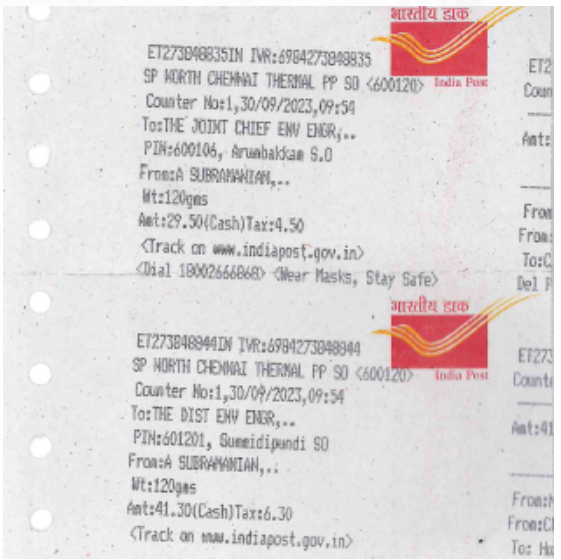
To,
The Member Secretary,
Tamil Nadu Pollution Control Board,
76, Mount Salai,
Guindy,
Chennai - 600 032

Dear Sir,

Sub: Submission of Environmental Statement (Form V) for the financial year ending 31st March, 2023 of Marine Infrastructure Developer Private Limited, Kattupalli Port, Chennai

Ref: 1. Consent Order No. 2105136876761 under Water Act dated 13.09.2021
2. Consent Order No. 2105236876761 under Air Act dated 13.09.2021

With reference to the captioned subject and cited references above, we submit herewith the Environmental Statement of **M/s Marine Infrastructure Developer Private Limited,** in Form-V prescribed under Rule 14 of the Environment (Protection) Rules 1986 for the financial year ending 31st March 2023.



Submitted for your kind information and records.

Thanking you,

For, **M/s. Marine Infrastructure Developer Private Limited**

Sudip Dasgupta
Chief Executive Officer

Encl: As above

Copy To:

1) The Joint Chief Environmental Engineer, Tamilnadu Pollution Control Board, First Floor, 950/1, Poonamallee High Road, Arumbakkam, Chennai-600 106
2) The District Environmental Engineer, Tamil Nadu Pollution Control Board, Gummidipoondi - 601201.

Marine Infrastructure Developer Pvt Ltd
(Kattupalli Port)
Kattupalli Village, Ponneri Taluk,
Tirivalluvar District 600 120,
Tamil Nadu, India

Tel +91 44 2824 3062

CIN: U74999TN2016PTC103769

Form-V

(See rule 14 of Environment (Protection) Rules, 1986)

Environmental Statement for the financial year ending 31st March 2023

PART – A

<table>
<tr><td>i) Name and Address of the owner/occupier of the industry operation or process</td><td>:</td><td>Mr. Sudip Dasgupta
Chief Executive Officer
Marine Infrastructure Developer Private Limited
Kattupalli Port,
Kattupalli Village, Ponneri Taluk,
Thiruvallur District – 600 120
Tamil Nadu, India</td></tr>
<tr><td>ii) Industry Category</td><td>:</td><td>Primary : Red
Secondary : 1065- Ports & Harbour, Jetties and Dredging Operations.</td></tr>
<tr><td>iii) Production Capacity</td><td>:</td><td>Cargo Handling Capacity: 24.65 MMTPA
<table>
<tr><th>S.No.</th><th>Description</th><th>Quantity in MMTPA</th></tr>
<tr><td>1.</td><td>Containers</td><td>10.28</td></tr>
<tr><td>2.</td><td>Ro-Ro (Automobiles)</td><td>0.00</td></tr>
<tr><td>3.</td><td>Project cargo</td><td>0.00</td></tr>
<tr><td>4.</td><td>Break Bulk / General Cargo (Barytes/ Gypsum/ Limestone/ Granite/ Steel Cargo/ Rock Phosphate/ Bauxite/ Dolomite Cargo)</td><td>0.81</td></tr>
<tr><td>5.</td><td>Edible oil, CBFS, Base Oil, Lube Oil and Non-Hazardous Liquid Cargo</td><td>0.42</td></tr>
</table></td></tr>
<tr><td>iv) Year of establishment</td><td>:</td><td>2009, with the issue of Environmental Clearance to L&T Ship Building.
Bifurcation of Environmental Clearance of L&T Ship Building to Marine Infrastructure Developer Private Limited on 09th February 2018.</td></tr>
<tr><td>v) Date of the last environmental statement submitted</td><td>:</td><td>Vide our Letter No. MIDPL/TNPCB/2021-22/119 dated 19.09.2022.</td></tr>
</table>

PART – B

WATER AND RAW MATERIAL CONSUMPTION

(i) Water Consumption

S. No	Water Consumption (m^3/ Day)	During the Current Financial year (2021-2022)	During the Current Financial year (2022-2023)
1.	Process	NIL	NIL
2.	Cooling	NIL	NIL
3.	Domestic	111.46	130.95

The unit does not undergo any manufacturing process. The water consumed is mainly for Firefighting, dust suppression on roads, Greenbelt development and maintenance, etc.

(ii) Raw Material Consumption

S. No	Name of the Raw Material	Name of the Product	Consumption during the financial year 2021-22.	Consumption during the financial year 2022-23.
1	Not Applicable	Not Applicable	NIL	NIL
The unit does not undergo any manufacturing process. Hence, there is no raw material consumption.				

PART – C

POLLUTION DISCHARGE TO ENVIRONEMENT/ UNIT OF OUTPUT

(Parameters as specified in the consent issued)

<table>
<tr><th>Pollutants</th><th>Quality of Pollutants Discharged (Mass/day)</th><th>Concentration of Pollutants discharges (mass/volume)</th><th>Percentage of variation from prescribed standards with reasons</th></tr>
<tr><td>a) Water</td><td colspan="3">STP Treated Water Characteristics: -
<table>
<tr><th rowspan="2">Parameter</th><th rowspan="2">Consent Limit</th><th colspan="3">Actual</th><th rowspan="2">% Variation with prescribed standard</th></tr>
<tr><th>30 KLD</th><th>10 KLD</th><th>5 KLD</th></tr>
<tr><td>pH</td><td>5.5-9</td><td>7.5</td><td>7.7</td><td>7.7</td><td>-Nil-</td></tr>
<tr><td>Total Suspended Solids (mg/l)</td><td>30</td><td>11.3</td><td>10.3</td><td>12.3</td><td>-Nil-</td></tr>
<tr><td>BOD (3 days at 27°C) (mg/l)</td><td>20</td><td>18.2</td><td>8.8</td><td>6.7</td><td>-Nil-</td></tr>
<tr><td>Fecal Coliform (MPN/100ml)</td><td>1000</td><td>154.2</td><td>111.7</td><td>112.6</td><td>-Nil-</td></tr>
</table></td></tr>
<tr><td>b) Air</td><td colspan="3">DG sets are provided as standby power source and are used during power failure only. The Height of DG stacks as per CPCB/TNPCB Standards. All the DG Sets are retrofitted to reduce the Particulate Matter emission level. Efficiency of the retrofitting equipment is observed above 90% against the TNPCB requirement of >70%.

All the monitored parameters are well within the prescribed standards.</td></tr>
<tr><td>Particulate Matter (mg/Nm3)</td><td colspan="3" rowspan="3">DG stack emission report is enclosed as Annexure 1.</td></tr>
<tr><td>Sulphur Dioxide (ppm)</td></tr>
<tr><td>Nitrogen Oxide (ppm)</td></tr>
</table>

PART-D

HAZARDOUS WASTES

(As specified under Hazardous Waste Management and Handling Rules 1989)

Hazardous Wastes	Total Quantity (Kg)	
	During the previous financial Year (2021-22)	During the current financial Year (2022-23)
(a) From Process	• (5.1) Used or Spent Oil - 2.31 KL	• (5.1) Used or Spent Oil - 1.597 KL • (5.2) Wastes or residues containing oil - 13.05 MT
(b) From Pollution control facilities	NA	NA

PART-E

SOLID WASTES

TOTAL QUANTITY GENERATED			
Solid Waste		During the previous Financial Year (2021 -22)	During the current Financial Year (2022-23)
a)	From process	NIL	NIL
b)	From pollution control facilities- STP Sludge	278 kgs	246 kgs
c)	1. Quantity recycled or reutilized within the Unit a) STP Sludge b) Horticulture Waste 2. Sold 3. Disposed	1. a) 278 Kgs b) 14.03 MT **Annexure - 2**	1. a) 246 Kgs b) 79.27 MT **Annexure-2**

Solid waste generated and disposed detail is enclosed as **Annexure – 2.**

PART-F

Please specify the characterization (in terms of composition and quantum) of hazardous as well as solid wastes and indicate disposal practice adopted for both these categories of wastes.

- **"Zero Waste to Landfill" Initiative** - No waste is being sent to landfill or incineration facility. MIDPL is having Integrated Waste Management System (IWMS) to proper segregate & recover the materials and are handled as per 5R (Reduce, Reuse, Recycle, Recover and Reprocess) principle.

- MIDPL has awarded with Zero Waste to Landfill Management System (ZWTL MS 2020) from TÜV Rheinland India Pvt. Ltd (**Annexure – 3**).

- Hazardous waste includes Cargo residue, washing water and sludge containing oil, Discarded Containers/ Barrels and Used/Waste/ Spent Oil. All the hazardous wastes are collected and stored properly in Integrated Waste Management Shed & are being disposed to TNPCB authorized /registered recyclers in line with the Hazardous and Other Waste (Management & Transboundary Movement) Rules, 2016 (As amended).

- The used batteries and E–waste are stored in Integrated Waste Management Shed and disposed through TNPCB approved recyclers as per the E-waste Management Rules 2016 (as amended).

- Hazardous Waste Annual returns in Form 4 was submitted in line with the Hazardous and Other Wastes (Management & Transboundary Movement) Rules, 2016.

- 100% utilization of STP sludge as manure for greenbelt maintenance.

- MIDPL completely banned the Single Use Plastic inside the Port premises. MIDPL is certified as "Single Use Plastic (SUP) Free" site from CII –ITC Centre of Excellence for Sustainable Development.

PART-G

Impact on pollution control measures on conservation of natural resources and consequently on the cost of production

- Roof Top Solar Plant with the solar power generation capacity of 1000 kW were installed at MIDPL. Around 12,60,000 Units per Annum being generated from Solar Plant. MIDPL has invested nearly Rs.4 Crs. for developing this solar plant there by achieved reduction of conventional energy and contributed for resource conservation.
- 15 RTGs retrofitted into Electrical power-driven system at the project cost of Rs.45 Crs. Key Cost benefits includes reduction in diesel consumption and emission level.
- Sewage Treatment Plants (30 KLD, 10 KLD and 5 KLD STPs) are in continuous operation and the treated effluent water quality is meeting the TNPCB norms. STP treated water is used for Gardening purpose, thereby reducing freshwater consumption. The total cost spent on STP operation and maintenance during the year 2022-23 is Rs. 18.77 Lakhs.
- Unit is undertaking Regular Environmental Monitoring in port through NABL accredited laboratory. We have also installed and operating Continuous Ambient Air Quality Monitoring Station (SO2, NOx, CO, PM10 & 2.5, BTX analyser to monitor VOC) and Meteorological Station (Wind Speed, Wind Direction, Ambient Temperature, Atmospheric Pressure, Relative Humidity, Rainfall and Solar Radiation). Real time data of CAAQMS is connected to TNPCB server. All the monitored environmental parameters are well within the prescribed standards and the details of monitored data is regularly being submitting to TNPCB, CPCB, MoEF&CC and other concerned authorities.
- All the domestic effluent generated at port is treated at existing Sewage Treatment Plants (30 KLD, 10 KLD and 5 KLD) and the entire treated sewage water is being reused within port premises for gardening.
- Motion sensor and timers installed at buildings to reduce energy consumption.
- RTG Container Stacking monitoring system implemented and achieved energy saving up to 18000 Units per year amounting to Rs. 1.35 L /Year.

- Air conditioners fitted with energy saving device "Eco Plug" and achieved energy saving of around 22.1MWH per year.
- Streetlight and High mast lighting controlled by light intensity sensor. Energy savings achieved around 29,000 units per year amounting to Rs. 2.15 Lakhs/Annum.
- 7,717 trees & 30,525 Shrubs planted as part of Greenbelt development program in the year 2022-23. Drip Line and Sprinkler System is provided at MIDPL for irrigation in Greenbelt and landscape areas.
- 2 no's of E – Cars Procured for Internal employes transportation and the cost is 0.25crs life time is 10 years and Annual monetary saving is 0.13crs.
- 450 KWp - Ground-mounted solar plant installation is under process and the Investment cost is 3crs, expected to complete: Dec 2023 and the estimated annual cost saving is 46L.
- 51 e-ITVs Internal transfer vehicles (ITVs) are used extensively in port operations. These are used for transfer of container cargo from ship to yard and vice versa and investment cost is 55crs. And utilizing renewable energy to charge the vehicles.

PART-H

Additional investment proposal for Environment protection including abatement of pollution, prevention of pollution

Regular Expenditure (cost in INR lakhs/year)		
S. No	**Description**	**Cost**
1	Comprehensive Environmental Monitoring and other Environment related Studies like impact Assessment Study, 3 season monitoring study, etc.	161.53
2	Integrated Waste Management	1.75
3	O&M of STP's & ETP	18.78
4	Housekeeping	95.20
5	Greenbelt Maintenance	41.05
	Total	318.31

PART-I

ANY OTHER PARTICULARS IN RESPECT TO ENVIRONMENT

- Handling of all types of wastes in line with 5R (Reduce, Reuse, Recycle, Recover and Reprocess) Principle.
- Paperless Operation is in place (Except for Statutory requirements) using application tools and Software – Terminal Info Gateway (TIG).
- Energy Conservation Committee to measure the amount of energy consumed and to actions to reduce the energy consumed through port operations.
- Water conservation measures are being adopted to conserve natural resources.
- Integrated Management System (ISO 9001:2015, 14001:2015, 45001:2018 and 50001:2018) certified Port.
- Obtained "5S" Certification at MIDPL
- MIDPL is bestowed with the top honors and the details of accolades received during the year 2022-23 are mentioned here under.
    - EKDKN's **Diamond Award 2022** under **Energy Efficiency** Category
    - Apex India Green Leaf Award 2022 - **Platinum Award** under **Sustainable Category**

- **Community Development:**

  Kattupalli Port has been propagating the community development through a broad based Corporate Social Responsibility (CSR) program in the project area through Adani Foundation since 2018 to ensure inclusive growth and catering to the developmental needs of the community at the grassroots level. The *project area encompasses 11 panchayats covering about 46 villages within 10 Km radius of the Kattupalli Port.* The key interventions introduced in the project area are as under:

  - Education
  - Community Health
  - community Infrastructure facility
  - Sustainable Livelihood development
  - Tree Plantation & Bio-Diversity development program
  - Special Focus Groups
  - COVID / Cyclone relief measures

Significant highlights during the year 2022-23 are as follows.

Education: 20 Adani Evening Education Centers where 600 students from fishermen, Irulars and other backward communities get benefit through this program.

Established Computer Smart Lab for government school students, where 450 students get benefit through this program, Pulicat Panchyat, Minjur and Tiruvallur, Tamilnadu.

Health: Addressing health issues of rural communities through mobile health care program where 1600 persons get benefit every month through this program.

Suposhan: Creating awareness and preventing unwanted health issues faced by mothers and children below 5 years of age working closely with government system and ensuring to improve the health condition of the children below 5 years of age.

Sustainable Livelihood Development: Natural Farming: Ensuring 100 farmers do natural farming by assisting them to ensure to adopt and implement the natural farming protocols as per the norms of government where government will certify them under PGS program.

Livelihood Enhancement program for 121 women through group based entrepreneurship program and providing livelihood support to 30 individuals- widows, destitute and persons with disabilities.

Community Infrastructure Development: Installed 10 high mast lights in the rural communities, Established 6 RO plants in the community, Government Schools and Government Hospitals in addressing to access to drinking water, Community Toilet for women was construected,Desilted Kattupalli pond and gave life to the pond, built toilet block for girl students of government school students, Pulicat Panchayats which will be benefited by girl students from four panchayats, planned to build a community hall for Satangkuppam and to do Desiltation of boat parking areas of fishermen in 18 locations.

Date: 23.09.2023

(Signature of a person carrying out an industry operation or process)

Name : **Sudip Dasgupta**

Designation: **Chief Executive Officer**

Address : Marine Infrastructure Developer Pvt Ltd (MIDPL)
Kattupalli Village, Ponneri Taluk,
Thiruvallur District – 600 120
Tamil Nadu, India.

Annexure-1

MIDPL- STACK MONITORING (April'2022 to March'2023)

Location		DG-1 2000KVA												Avg
Month & Year		Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	
S.No.	Parameters	19.04.22	16.05.22	27.06.22	20.07.22	16.08.22	16.09.2022	21.10.2022	17.11.2022	26.12.2022	31.01.2023	20.02.2023	16.03.2023	
1	Stack Temperature, °C	255	264	275	268	247	258	-	247	259	-	251	-	258.2
2	Flue Gas Velocity, m/s	24.72	25.61	27.01	26.36	24.12	26.34	-	24.68	25.42	-	23.98	-	25.4
3	Gas Discharge, Nm3/hr	6299	6416	6632	6557	6241	6675	-	6385	6429	-	6157	-	6421.2
4	Sulphur Dioxide, mg/Nm3	7.5	8.1	8.7	7.9	8.3	9.1	-	8	7.9	-	7.1	-	8.1
5	NOX (as NO2) in ppmv	201	214	230	214	207	230	-	219	206	-	198	-	213.2
6	Particular matter, mg/Nm3	10.2	11.7	10.4	11.7	10.8	11.5	-	9.2	8.7	-	9.5	-	10.4
7	Carbon Monoxide, mg/Nm3	50	54	51	48	45	49	-	46	39	-	32	-	46.0

Location		DG-2 2000KVA												Avg
Month & Year		Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	
S.No.	Parameters	19.04.22	16.05.22	27.06.22	20.07.22	16.08.22	16.09.2022	21.10.2022	17.11.2022	26.12.2022	31.01.2023	20.02.2023	16.03.2023	
1	Stack Temperature, °C	251	251	267	-	255	251	-	240	241	-	260	-	252.0
2	Flue Gas Velocity, m/s	25.28	26.08	26.83	-	25.96	25.04	-	25.86	23.46	-	24.76	-	25.4
3	Gas Discharge, Nm3/hr	6491	6697	6685	-	6615	6429	-	6782	6142	-	6240	-	6510.1
4	Sulphur Dioxide, mg/Nm3	8	8.9	8.4	-	8.7	8.3	-	7.6	7.1	-	7.5	-	8.1
5	NOX (as NO2) in ppmv	214	223	227	-	221	209	-	205	198	-	204	-	212.6
6	Particular matter, mg/Nm3	11.6	10.1	10.9	-	10.4	9.8	-	9.5	8	-	8.7	-	9.9
7	Carbon Monoxide, mg/Nm3	48	52	55	-	49	44	-	41	34	-	36	-	44.9

Location		DG-4 500 KVA												Avg
Month & Year		Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	
S.No.	Parameters	19.04.22	16.05.22	27.06.22	20.07.22	16.08.22	16.09.2022	21.10.2022	17.11.2022	26.12.2022	31.01.2023	20.02.2023	16.03.2023	
1	Stack Temperature, °C	-	160	-	155	163	-	170	-	-	159	-	179	164.3
2	Flue Gas Velocity, m/s	-	16.27	-	14.24	14.91	-	15.78	-	-	16.32	-	18.08	15.9
3	Gas Discharge, Nm3/hr	-	1672	-	1480	1520	-	1584	-	-	1682	-	1779	1619.5
4	Sulphur Dioxide, mg/Nm3	-	7.1	-	6.1	6.5	-	6.9	-	-	6.5	-	7.3	6.7
5	NOX (as NO2) in ppmv	-	98	-	87	92	-	98	-	-	87	-	107	94.8
6	Particular matter, mg/Nm3	-	6.5	-	6	7.1	-	8.3	-	-	7.1	-	10.3	7.6
7	Carbon Monoxide, mg/Nm3	-	18	-	14	22	-	20	-	-	18	-	54	24.3

Location		DG-5 125 KVA												Avg
Month & Year		Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	
S.No.	Parameters	19.04.22	16.05.22	27.06.22	20.07.22	16.08.22	16.09.2022	21.10.2022	17.11.2022	26.12.2022	31.01.2023	20.02.2023	16.03.2023	
1	Stack Temperature, °C	126	120	124	-	121	-	127	-	-	124	-	134	125.1
2	Flue Gas Velocity, m/s	11.09	11.79	12.47	-	11.83	-	12.41	-	-	12.09	-	11.23	11.8
3	Gas Discharge, Nm3/hr	525	566	594	-	568	-	587	-	-	576	-	522	562.6
4	Sulphur Dioxide, mg/Nm3	4.2	4.7	5.3	-	4.7	-	5.3	-	-	5.1	-	3.7	4.7
5	NOX (as NO2) in ppmv	55	50	54	-	51	-	57	-	-	23	-	51	48.7
6	Particular matter, mg/Nm3	5	5.3	4.7	-	5.8	-	6.4	-	-	9.4	-	4.6	5.9
7	Carbon Monoxide, mg/Nm3	18	16	13	-	16	-	18	-	-	16	-	19	16.6

Location		FIRE WATER PUMP HOUSE: DG-1 125 KVA												Avg
Month & Year		Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	
S.No.	Parameters	19.04.22	16.05.22	27.06.22	20.07.22	16.08.22	16.09.2022	21.10.2022	17.11.2022	26.12.2022	31.01.2023	20.02.2023	16.03.2023	
1	Stack Temperature, °C	-	-	-	129	-	-	-	-	-	-	-	-	129.0
2	Flue Gas Velocity, m/s	-	-	-	10.46	-	-	-	-	-	-	-	-	10.5
3	Gas Discharge, Nm3/hr	-	-	-	218	-	-	-	-	-	-	-	-	218.0
4	Sulphur Dioxide, mg/Nm3	-	-	-	8.6	-	-	-	-	-	-	-	-	8.6
5	NOX (as NO2) in ppmv	-	-	-	59	-	-	-	-	-	-	-	-	59.0
6	Particular matter, mg/Nm3	-	-	-	16	-	-	-	-	-	-	-	-	16.0
7	Carbon Monoxide, mg/Nm3	-	-	-	32	-	-	-	-	-	-	-	-	32.0

Location		FIRE WATER PUMP HOUSE: DG-2 125 KVA												Avg
Month & Year		Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	
S.No.	Parameters	19.04.22	16.05.22	27.06.22	20.07.22	16.08.22	16.09.2022	21.10.2022	17.11.2022	26.12.2022	31.01.2023	20.02.2023	16.03.2023	
1	Stack Temperature, °C	-	-	-	135	-	-	-	-	-	-	-	-	135.0
2	Flue Gas Velocity, m/s	-	-	-	11.93	-	-	-	-	-	-	-	-	11.9
3	Gas Discharge, Nm3/hr	-	-	-	245	-	-	-	-	-	-	-	-	245.0
4	Sulphur Dioxide, mg/Nm3	-	-	-	15.2	-	-	-	-	-	-	-	-	15.2
5	NOX (as NO2) in ppmv	-	-	-	73	-	-	-	-	-	-	-	-	73.0
6	Particular matter, mg/Nm3	-	-	-	19	-	-	-	-	-	-	-	-	19.0
7	Carbon Monoxide, mg/Nm3	-	-	-	47	-	-	-	-	-	-	-	-	47.0

Location		LIQUID TERMINAL: HOT OIL GENERATOR STACK												Avg
Month & Year		Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	
S.No.	Parameters	19.04.22	16.05.22	27.06.22	20.07.22	16.08.22	16.09.2022	21.10.2022	17.11.2022	26.12.2022	31.01.2023	20.02.2023	16.03.2023	
1	Stack Temperature, °C	-	-	-	-	-	-	-	-	-	159	-	-	159.0
2	Flue Gas Velocity, m/s	-	-	-	-	-	-	-	-	-	9.97	-	-	10.0
3	Gas Discharge, Nm3/hr	-	-	-	-	-	-	-	-	-	35382	-	-	35382.0
4	Sulphur Dioxide, mg/Nm3	-	-	-	-	-	-	-	-	-	7.4	-	-	7.4
5	NOX (as NO2) in ppmv	-	-	-	-	-	-	-	-	-	23	-	-	23.0
6	Particular matter, mg/Nm3	-	-	-	-	-	-	-	-	-	9.4	-	-	9.4
7	Carbon Monoxide, mg/Nm3	-	-	-	-	-	-	-	-	-	18	-	-	18.0

Environment Statement for 2022-23 for M/s Marine Infrastructure Developer Pvt Ltd

Annexure - 2

Details of Solid Waste Management

Sr. No.	Waste Description	Method of disposal	Unit	Quantity 2021-22	Quantity 2022-23
1	Dry Waste (Recyclable waste Metal, Wood, paper, plastic etc.)	Registered Recyclers	MT	12.00	212.23
2	Horticulture Waste	Reused as manure for greenbelt	MT	14.03	79.3
3	Food Waste	Sent to vendor to reuse as Cattle feed	MT	2.7	2.2
4	E-Waste	Registered Recyclers	MT	1.63	1.9
5	Battery Waste	Registered Recyclers	MT	Nil	8.88

TÜVRheinland®
Precisely Right.

Certificate

Standard: **Zero Waste to Landfill Management System (ZWTL MS 2020)**

Certificate Holder: **Marine Infrastructure Developer Private Limited**
Kattupalli Port, Tiruvallur - 600120
Tamil Nadu,India

Scope: **Providing Port Facilities for Handling and Storage of Bulk Cargo, Containerized Cargo and Liquid Terminal Operations**

Proof has been furnished by means of an audit that the Requirements of ZWTL MS 2020 are met, with the achievement of waste diversion rate of above 99%

Validity: This certificate is valid from 01-06-2021 until 31-05-2024
Subject to satisfactory annual surveillance audits.

Certificate No. TUV/ZWLMS/2021/Adani Ports/0502

New Delhi, 01-06-2021

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